APPRAISAL BULLETIN

PUBLISHED IN THE INTERESTS OF REAL ESTATE ANALYST SUBSCRIBERS BY

ROY WENZLICK & CO.

Real Estate Economists, Appraisers and Counselors

JANUARY 31
1949

Volume XVIII

Number 4

REPLACEMENT COST, WORTH AND MARKET PRICE

IN May 1946 we published our first Appraisal Bulletin dealing with the replacement cost, worth and market price of our standard six-room frame house. Since that time so many changes of considerable magnitude have occurred that we decided to bring the information up to date and to expand it in a new bulletin.

In order to point out some of the changes that have come about in the last few years, we have drawn the chart on pages 36 and 37. In the center portion of this chart are a number of red and blue lines roughly resembling a very battered and misshapen wave. The lines begin at an apex in 1913 and proceed eccentrically across the chart to 1949 with a line being added each year. Each line represents the worth of the fifty-foot lot and six-room frame house, built in the year during which that line was added. For example, the dotted blue line along the bottom of the wave represents the worth of a six-room frame house built in 1913, and the value of its lot. In that year the original construction cost plus the price of the lot totaled $5,336 and is so indicated on the chart. In 1920 the replacement cost on this same house had risen to $7,680. By deducting 14% (7 years) depreciation from the 1920 replacement cost we find the worth of the house to be $6,600 which, added to the $1,600 lot value, gives a worth of $8,200 for the house and lot in 1920. This point, $8,200, is indicated by the lower dotted blue line in 1920. In 1924 the the worth of the house, $5,840, plus the $2,100 lot value gives a worth of $7,940 for the house and lot in 1924, the point also indicated by the lower dotted blue line. In other words, the values represented by the red and blue lines indicate the worth of the house and lot for any given year. Each of the 37 lines traces out the worth of a lot and house of different age, i. e., new to 36 years old. The year in which the house was built is shown by the column of dates at the right-hand end of the lines. The heavy blue line at the top of the wave indicates the replacement cost new plus the price of the lot for each of the 37 years.

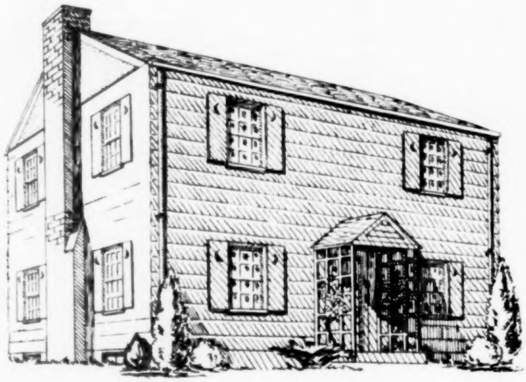
The lines corresponding to years ending in zero or five have been drawn in red in order to make it easier to follow their course through this rather complicated chart.

The value of the lot is shown by the red shaded band at the bottom of the chart.

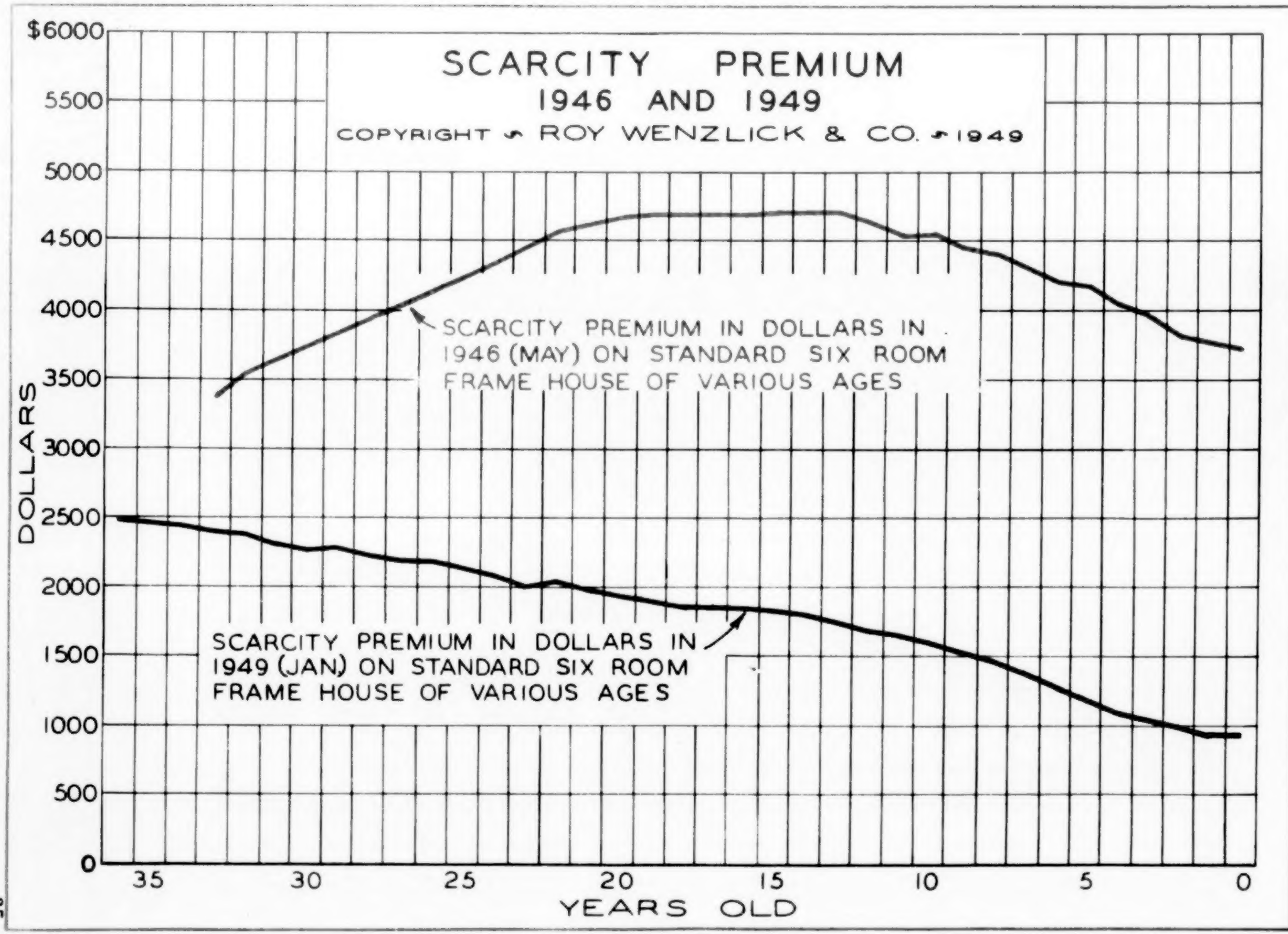
The red dotted line starting in 1913 and sloping to the lower right-hand corner shows what the value of the house would be in any year, if the building had been constructed in 1913 and had been depreciated at 2% per year from the original (1913) cost for the next 50 years. This line is used to show that a 2% deduction per year

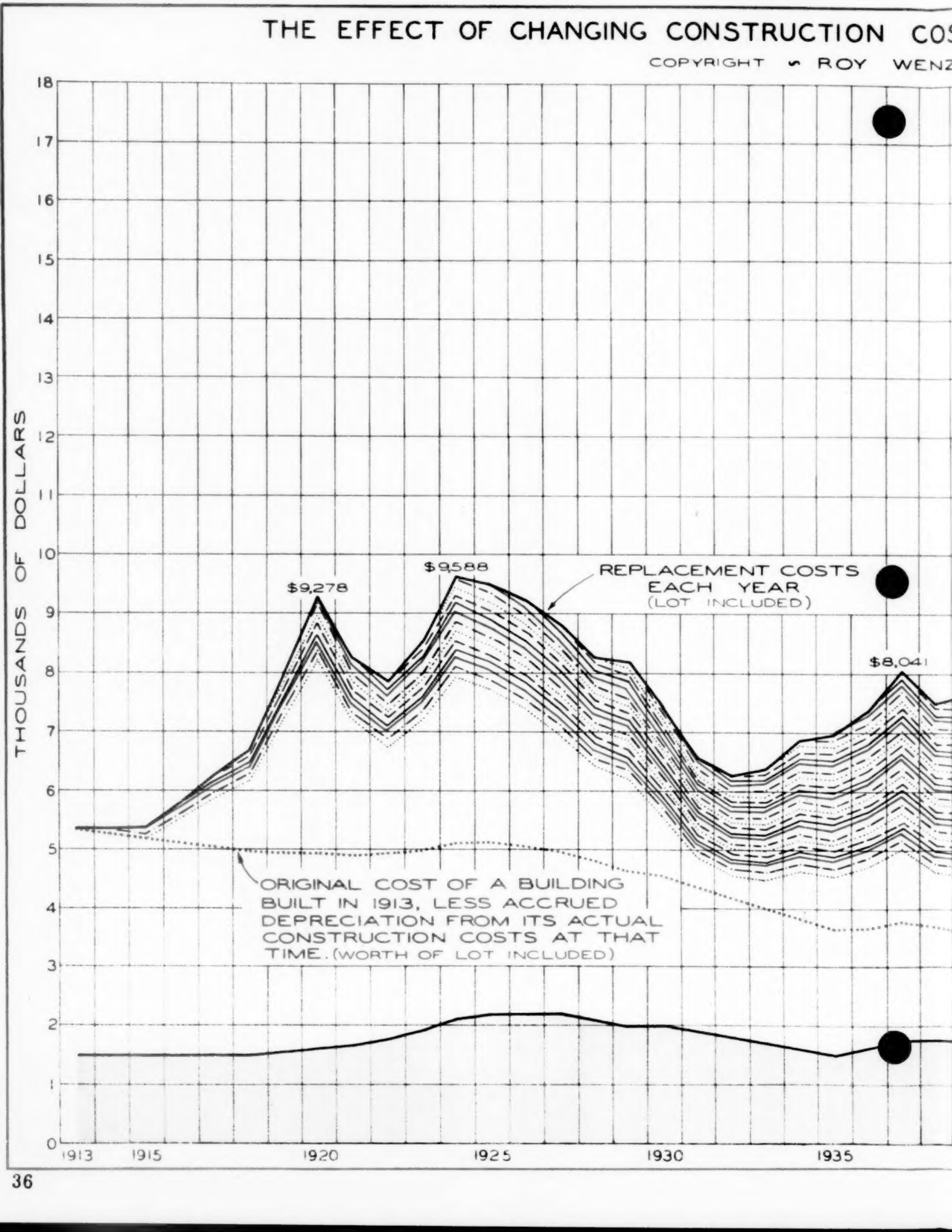
(cont. on page 39)

STANDARD SIX ROOM FRAME HOUSE



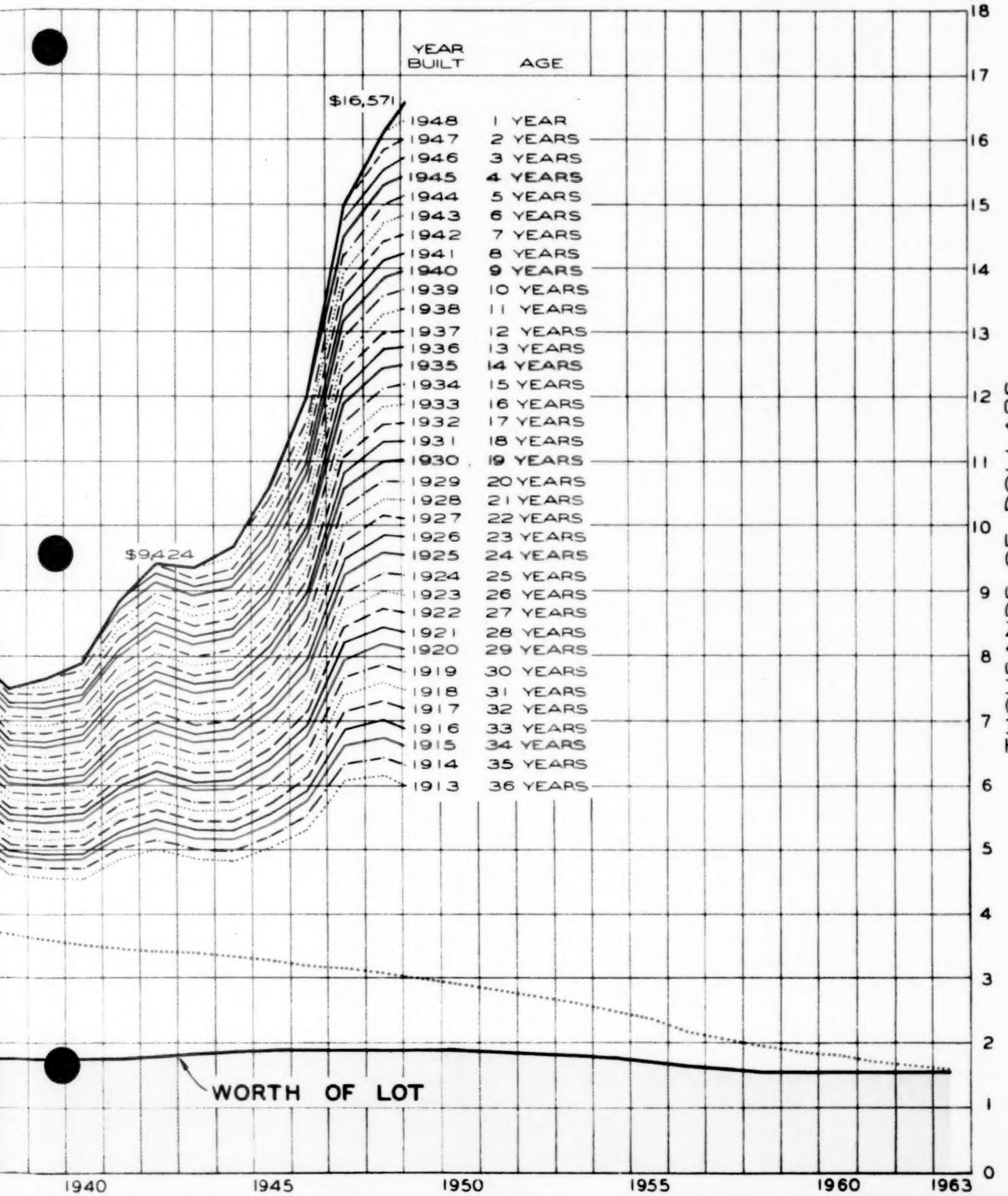
Specifications: Full basement - 12-inch poured concrete foundation; exterior walls redwood siding over sheathing and 2 x 4 studs - interior partitions 3-coat plaster over wood lath - hardwood floors - tile floors and wainscoting in bath and lavatory - built-in kitchen cabinets - asphalt shingle roof - 4-inch rock wool insulation in ceiling - no landscaping - no walks and drives - no electrical fixtures.


SCARCITY PREMIUM
1946 AND 1949
COPYRIGHT • ROY WENZLICK & CO. • 1949
SCARCITY PREMIUM IN DOLLARS IN 1946 (MAY) ON STANDARD SIX ROOM FRAME HOUSE OF VARIOUS AGES
SCARCITY PREMIUM IN DOLLARS IN 1949 (JAN) ON STANDARD SIX ROOM FRAME HOUSE OF VARIOUS AGES
DOLLARS
$6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
35
30
25
20
15
10
5
0
YEARS OLD


THE EFFECT OF CHANGING CONSTRUCTION CO
COPYRIGHT - ROY WENZ
THOUSANDS OF DOLLARS
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
$9,278
$9,588
REPLACEMENT COSTS EACH YEAR (LOT INCLUDED)
$8,041
ORIGINAL COST OF A BUILDING BUILT IN 1913, LESS ACCRUED DEPRECIATION FROM ITS ACTUAL CONSTRUCTION COSTS AT THAT TIME. (WORTH OF LOT INCLUDED)
1913
1915
1920
1925
1930
1935

OSTS ON THE WORTH OF OLDER BUILDINGS

NZLICK & CO. - 1949



STANDARD SIX ROOM FRAME HOUSE

THE table below shows the original cost of our standard six-room frame house built in St. Louis on a fifty-foot lot for every year from 1913 to the present. It also shows the present worth, the estimated market value, the scarcity premium (the difference between present worth and market value), and scarcity premium as a percentage of present worth.

Year Built	Original Cost	Present Worth 1949	Market Value	Scarcity Premium	% of Scarcity Premium
1913	$ 5,336	$ 6,010	$ 8,500	$2,490	41-1/2
1914	5,336	6,305	8,770	2,465	39
1915	5,337	6,600	9,050	2,450	37
1916	5,767	6,890	9,300	2,410	35
1917	6,247	7,180	9,560	2,380	33
1918	6,685	7,480	9,800	2,320	31
1919	7,959	7,770	10,050	2,280	29-1/2
1920	9,278	8,060	10,350	2,290	28-1/2
1921	8,255	8,360	10,600	2,240	27
1922	7,853	8,650	10,850	2,200	25-1/2
1923	8,532	8,950	11,150	2,200	24-1/2
1924	9,583	9,245	11,380	2,135	23
1925	9,484	9,540	11,620	2,080	22
1926	9,245	9,830	11,840	2,010	20-1/2
1927	8,835	10,120	12,150	2,030	19-1/2
1928	8,292	10,410	12,400	1,990	19
1929	8,208	10,800	12,750	1,950	18
1930	7,447	11,000	12,910	1,910	17-1/2
1931	6,577	11,290	13,150	1,860	16-1/2
1932	6,280	11,590	13,450	1,860	16
1933	6,391	11,880	13,720	1,840	15-1/2
1934	6,877	12,180	14,000	1,820	15
1935	6,968	12,470	14,270	1,800	14-1/2
1936	7,390	12,760	14,510	1,750	13-1/2
1937	8,041	13,050	14,750	1,700	13
1938	7,521	13,350	15,000	1,650	12-1/2
1939	7,644	13,640	15,240	1,600	11-1/2
1940	7,897	13,930	15,455	1,525	11
1941	8,824	14,220	15,695	1,475	10-1/2
1942	9,424	14,520	15,900	1,380	9-1/2
1943	9,353	14,820	16,120	1,300	9
1944	9,657	15,110	16,310	1,200	8
1945	10,545	15,400	16,500	1,100	7
1946	11,974	15,700	16,750	1,050	6-1/2
1947	14,984	15,990	16,990	1,000	6
1948	16,100	16,280	17,230	950	6
Jan. 1949	16,550	16,550	17,500	950	5-1/2

(cont. from page 33)

from the original cost is incorrect for, as the dotted red line shows, at the end of 50 years the economic value of house and lot would be only the value of the ground.

Accrued depreciation should be deducted not from the original cost but from current replacement cost. That is the procedure followed in plotting the red and blue lines in the center portion of the chart. Going back to the lower dotted blue line representing the worth of the lot and house built in 1913, we see that this line deducts 2% depreciation from the 1914 replacement cost, 6% from the 1916 replacement cost, 14% from the 1920 replacement cost, 40% from the 1933 replacement cost, etc., through all of the years from 1913-1949. The same steps are followed with all of the other lines representing the worth of houses built in the different years.

This study makes it possible to get an approximate idea of the increase or decrease in the worth of a property of any given age as construction costs increase or decrease. If a property built in 1932 is taken as an example, it will be found that in spite of the fact that this property is now 17 years old with a theoretical deduction of 34% for accrued depreciation, its worth has increased from $6,280 to $11,590. By the same token a building erected in 1940 costing at the time $7,897, in spite of the fact that 18% should be deducted for depreciation, is now worth $13,930. In a normal market the greater the age of the building the less is its worth increased by a rise in construction costs. The worth of a very old building will not be increased at all by a rise in construction costs, although its market price might go up by a large percentage.

In the table on page 38 of this report various figures are given for the standard six-room frame house built on a fifty-foot lot in St. Louis by years from 1913 to the present.

The first column in this table shows the year in which the building was built; the second column, the original cost of the building and lot; the third column, the present worth as distinguished from market price; the fourth column, the market price as determined by sales in the present market. (These figures are based on St. Louis experience, which we consider typical.)

The fifth column shows the amount by which the market price exceeds the present worth. This represents the premium which is being paid for scarcity and which has shrunk greatly since 1946 and which will continue to shrink as the housing shortage diminishes. It should be kept in mind, however, that this shrinkage can take place in two ways, either by a drop in market price or by an increase in construction costs, which will increase present worth. The recent shrinkage has been due almost entirely to increased construction costs since 1946, although some shrinkage has taken place in the market price of residences over 15 years old.

The sixth column in this table shows the percentage by which the market value on this type of building at the present time exceeds its present worth. This column should be of considerable interest to appraisers, as it shows that the scarcity premium is still greater on older buildings than it is on newer ones. This column should also be useful in securing more realistic listings.

(cont. on page 40)

(cont. from page 39)

The comparison between the scarcity premium in 1946 and in 1949 is shown by the chart on page 35. The red line shows the scarcity premium in 1946 on the standard six-room frame house of different ages, while the blue line shows the lower scarcity premium of 1949 on the same type house. The present scarcity premium ranges from $2,490 on a six-room frame house 36 years old (built in 1913) down to $950 on the same type house one or two years old.

While the percentage figures are not shown on the chart, they are shown in the table. It will be noticed that the scarcity premium in 1949 ranges from 41-1/2% on a house built in 1913 to 5-1/2% on a new house. In 1946 this scarcity premium started at 63% on a house built in 1913 and fell to 31% on a new house.